A13.E126
JACC March 9, 2010
Volume 55, issue 10A

CARDIAC ARRHYTHMIAS

PRESENCE OF FRAGMENTED WIDE- QRS COMPLEX AND THE RISK OF DEATH AND SUDDEN CARDIAC DEATH AMONG MADIT- II PATIENTS WITH LEFT BUNDLE BRANCH BLOCK.

ACC Poster Contributions
Georgia World Congress Center, Hall B5
Tuesday, March 16, 2010, 9:30 a.m.-10:30 a.m.

Session Title: ECG - Risk Stratification for Clinical Events
Abstract Category: ECG/Ambulatory Monitoring Signal Averaging
Presentation Number: 1244-130

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Background: There are limited data on the role of fragmented wide QRS complex (f-wQRS) in predicting cardiac events.

Methods: We analyzed baseline electrocardiograms (ECG) in 209 patients with left bundle branch block (LBBB) from the Multicenter Automatic Defibrillator Implantation Trial-II (MADIT II). F-wQRS was defined as the presence of >2 notches on the R wave or the S wave and had to be present in 2 contiguous anterior (V1-V5), lateral (I, aVL, V6) or inferior (II, III, aVF) leads. The end-points were: 1) the risk of death of all causes; 2) the risk of sudden cardiac death (SCD)

Results: During 580+/-361 days of the follow-up, there were 51 deaths (including 20 SCD). F-wQRS was present on 49 (23%) ECG; anterior leads 13 (6%), lateral leads 21 (10%) and inferior leads 28 (14%). The presence of f-wQRS in any leads showed a trend toward increased total and sudden mortality in univariate, but not in multivariate analyses. F-wQRS in inferior leads was associated with an increased probability of death in univariate (Figure: probability of death by presence of f-wQRS in inferior leads) and multivariate analysis (HR= 2.30; p=0.010). In the analysis of secondary end-point, f-wQRS in the inferior leads has higher risk for SCD (HR 3.97; p=0.017).

Conclusions: Our findings suggest that f-wQRS complex in inferior lead is associated with higher all-cause and sudden mortality. F-wQRS complex in the patients with LBBB and ischemic left ventricular dysfunction might be useful ECG parameter identifying high risk individuals.